



## THE PARIS SHOW (CONTINUED)

(Left) The front of the Koolhoven F.K. 58 single-seater fighter, showing the unusual cowling over the two-row Hispano and the bulges beneath the wings for the four Browning guns.

### Miscellaneous Military Types and Trainers

THERE is usually one French exhibit which appears, on the face of things, to surpass all its predecessors in crudity of design. This year it is the Loire 130 single-engined pusher flying boat designed for catapulting from naval vessels and for colonial operation. Actually, this machine is being greatly misjudged because it is a type which, for a year or



A section of the German "territory," showing the Dornier Do. 17 with its two Bramo Fafnir radials and its distinctive camouflage.

and a special transparent compartment under the fuselage to facilitate observation. The machine is comparatively slow (one of the penalties in "g.p." designs), the top speed being less than 220 m.p.h. It may be recalled that the specialised Hanriot twin-engined fighter with the same engines is claimed to do well over 300 m.p.h.

Likewise of particular interest (because it is the counterpart of our Blackburn Skua, which is represented by a model) is the American Vought V-156, which, for shipboard use, has folding wings. The President, on his official round of the stands, took a great interest in the wing-folding arrangements, showing himself to be a man of extensive technical knowledge. The V-156 is the export version of the SB2U-1 scout dive-bomber, now widely used by the U.S. Navy. It is designed for dive bombing with a 500- or 1,000-lb. bomb which is carried under the fuselage and provided with a special displacement gear to ensure that the falling projectile clears the airscrew. The construction is of fairly orthodox composite type, the wing having one strong tubular spar. The Pratt and Whitney Twin Wasp Junior engine is fitted with a

constant-speed airscrew, which helps to keep down the revs in a bombing dive. The flaps are not designed to retard the diving speed, as on our Skua. Complete performance figures are not issued, but one was told that the machine will cruise at about 230 m.p.h. It is emphasised that the V-165 will take all the "G" anyone likes to impose on it.

The nose of the Caudron light fighter (450 h.p. inverted-vee Renault) showing the Bronzavia flame-dampers.



A dummy Oerlikon shell-gun and two wooden Brownings protrude from the nose of the P.Z.L. Wolf twin-engined light fighter. Note the landing lights.

two now, has been giving very useful service and which was designed more for comfort and practicability under arduous conditions than for performance. It is, in effect, the counterpart of our Supermarine Walrus and is fitted with a single Hispano Suiza Series X engine. It would seem impossible to add any more excrescences, but, nevertheless, the manufacturers claim a top speed of about 140 m.p.h.

The larger and more modern French military flying boats are represented by a large-scale model of the Breguet 730 and the Potez-C.A.M.S. 141. The proto-

